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Transcript of talk by Vibeke Sorensen
Panel: The Artist in the 2 and 3 -D Marketplace

Pioneering interactions between artists and various branches of the wider marketplace I call “industry” have brought fruit benefiting both groups in tangible ways, as we have seen and heard from our panelists here. The synergy and productivity is generally very hopeful and often inspiring for a new generation of artists seeking to align their creative intelligence with a rapidly changing high-tech society.

These prototypes as role models include members of this audience and panel, and companies interested in prototyping future products, new user interfaces and hypermedia, such as Apple Computer, Pacific Data Images and the National Center for Supercomputing Applications (NCSA) who support their artists doing their own work as a formal part of their employment.

Despite these admirable examples, the situation is still problematic. I feel that fine artists and the marketplace are still basically incompatible because their value systems are so different. Where success in the marketplace is judged ultimately by financial success, success in the fine art world is defined by quality and innovation. The marketplace can sometimes be unsupportive and uninformed, mistreating their artists while simultaneously exploiting them. Artists should keep standards high, demand respect and know that they hold essential knowledge for the development of the computer graphics-visualization field. Artists should be treated as equals, since computer graphics is an interdisciplinary field combining computer science and graphic art. Being part of a visual culture, artists should be conscious and proud of their role, aware of their importance, and demand and receive the respect and compensation they deserve for their contribution to the field.

While artists can be used as illustrators and designers, a sometimes more profound and appropriate use of the artist in computer graphics is that of researcher. Artists are a window to the future, they are visionaries who pioneer new uses of technology, and in many ways, though secondary to the goal of artmaking for art’s sake, art is \geq applications. (I am defining artmaking as a desire to transform or reflect the world as a visionary sees it.) Artists should think of themselves not only as designers but as researchers and pioneers in technology. They should apply for and receive positions in industry and academia side by side with computer scientists, and work in tandem with these people doing their own work as well as the work of others. Visual artists are expert at visual language and visual communication, and in essence are conducting research in image creation. Frequently, this work is the same work as the research scientists’, but undertaken for different reasons.

Artists have an important contribution to make to the new field of Scientific Visualization. Artists today are highly educated and innovative intellectuals in addition to being organizers of visual information, and Scientific Visualization artists function beyond illustrators, applying their

creativity to new information. The National Science Foundation Report on Scientific Visualization of 1987 serves to validate this view. Donna Cox of NCSA is setting an excellent example. She and her colleagues have pioneered the “Renaissance Teams” which bring together artists and scientists in joint efforts in scientific research, specifically in the visual representation of multi-dimensional data. The Art(n) group in Illinois is also active in the synthesis of art and science. The San Diego Supercomputer Center (SDSC) is in the process of starting a Scientific Visualization program, and Holliday Horton is collaborating with scientists on various projects, including an Omnimax project depicting the formation of the solar system. I am currently collaborating with Dr. Lynn Teneyck at SDSC on a research project in interactive stereoscopic animation, funded by the National Science Foundation. At the Jet Propulsion Laboratory in Pasadena, I recently collaborated with Dr. Brian Muirhead and a fine group of researchers on the creation of 2 animation sequences showing a robot taking rock samples on Mars, as part of a simulation of the Mars Rover Mission. This experience was a delight for me, since I felt I was helping science while at the same time educating myself.

Contrary to popular opinion, research-fine artists and research-fine scientists share a great many concerns and sensibilities, and are able to truly enhance each other’s work in profound ways. There is a natural link between the two, a natural desire to share ideas, vision, and expertise. Scientific Visualization is an area where I feel the artist as intellectual, the artist as interpreter of complex data and concepts is well suited and integrates smoothly.

Fine artists are also good and necessary role models for the next generation of computer graphics professionals. Let us not forget that education is an important and respectable profession. Not only is this a way to give back to a society and world which has provided for us, but it is also a way for us to pursue, un beholden except to our highest ideals, the purest goals of our creative minds. For many artists, intellectual freedom is worth more than the difference in pay scales between various jobs. Further, to insure the longevity of the field, which ultimately will sustain each and every one of us in this field, it is vital that the field continue to transform itself in tandem with society. Since artists are also the mirror of our time and the conscience of the culture, artists are, in a way, a “short cut” to this sometimes elusive knowledge about society. But be aware that the truth is sometimes painful and the predictions of visionaries are confirmed only in the future, that at the time of invention, a new work or idea may not be immediately valued. It may seem worthless, but actually be worth a million. Have the courage of your convictions, and you will probably not be disappointed.

Even if you want to do commercial work because it seems “guaranteed,” keep in mind that popular culture is based on change, always a “new look.” The best way to be remembered is to innovate, not imitate. By refining your personal “look,” you become more unique and therefore more marketable. Some of the very best designers are also fine artists.

Keep up your dreams and your integrity. If you are a good artist, you will have many opportunities. You can choose according to your value system and you may even be able to create a more compatible job for yourself than you imagined possible. For example, study a company or environment, figure out how your expertise can enhance and benefit it and make a proposal. You may be surprised with the results.

Realize that our time on the planet is limited, that time is our only hard currency, that no matter how much money we have, we cannot buy back the time once it is gone. Weigh your choices carefully and choose the path that passes what I call “the eighty year old test.” Will you be proud of what you did with your life when you are 80 and looking back over it?